



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/675,306	06 09/30/2003		Jorge F. Escobar	HSJ920030204US1	5363		
28722	7590	10/05/2005		EXAMINER .			
BRACEWI	ELL & PA	TTERSON, L.L.P	SNIEZEK, ANDREW L				
P.O. BOX 9 AUSTIN, T		0969		ART UNIT	PAPER NUMBER		
Hoofin, IX 10101 0505				2651			

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.		Applicant(s)					
Office Action Summary			10/675,306 ESCOBAR ET AL.							
			Examiner		Art Unit					
		1	Andrew L. Sniez		2651					
<i>The M</i> Period for Reply	AILING DATE of this commu	nication appea	ars on the cove	er sheet with the c	orrespondence ad	ddress				
WHICHEVER - Extensions of tir after SIX (6) MC - If NO period for - Failure to reply v Any reply receiv	ED STATUTORY PERIOD IN RIS LONGER, FROM THE IN THE INTERIOR INTERIOR IN THE INTERIOR INTER	MAILING DAT as of 37 CFR 1.136 amunication. statutory period will by will, by statute, ca	TE OF THIS Co (a). In no event, how apply and will expire ause the application	OMMUNICATION vever, may a reply be time SIX (6) MONTHS from to become ABANDONE	I. nely filed the mailing date of this c O (35 U.S.C. § 133).					
Status										
1)⊠ Respor	nsive to communication(s) fil	led on 1/23/04	4							
	tion is FINAL .		z. action is non-fin	al						
<i>'</i> =	nis application is in condition	<i>,</i> —			secution as to the	a morite ie				
	in accordance with the pract					e ments is				
Disposition of C			parto quayro,	1000 0.5. 11, 40	0.0.210.					
·	•	annlination								
	s) <u>1-20</u> is/are pending in the	• •	o from annoide	4:						
	4a) Of the above claim(s) is/are withdrawn from consideration.									
	Claim(s) is/are allowed.									
	Claim(s) <u>1-20</u> is/are rejected.									
	s) is/are objected to.									
8)⊡ Claim(s	s) are subject to restri	iction and/or e	election require	ement.						
Application Pape	ers					•				
9)□ The spe	cification is objected to by the	ne Examiner.								
10)⊠ The dra	wing(s) filed on <u>30 Septemb</u>	er 2003 is/are	e: a)⊠ accept	ed or b) object	ted to by the Exar	miner.				
	it may not request that any obje									
	ment drawing sheet(s) includin					FR 1.121(d).				
	n or declaration is objected t									
Priority under 35	5 U.S.C. § 119									
	ledgment is made of a claim b) Some * c) None of:	ı for foreign pı	riority under 35	5 U.S.C. § 119(a)	-(d) or (f).					
		, daarimaanta h	 							
	ertified copies of the priority									
	ertified copies of the priority									
	opies of the certified copies				d in this National	Stage				
	pplication from the Internation									
See the a	attached detailed Office action	on for a list of	the certified co	opies not receive	d.					
Attachment(s)				•						
/	ences Cited (PTO-892)		∧ .□	Intoniou Comment	(DTO 442)					
2) D Notice of Drafts	person's Patent Drawing Review (I	PTO-948)	4) 🗀	Interview Summary Paper No(s)/Mail Da						
Information Dise Paper No(s)/Ma	closure Statement(s) (PTO-1449 or	r PTO/SB/08)			atent Application (PTC	D-152)				
			υ <u></u>	Outer						

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 1/23/04 has been considered.

Drawings

2. The drawings filed 9/30/03 are acceptable to the examiner.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17-20 set forth a computer program product of claim 15, however claim 15 is directed to rapidly warming a hard disk drive and has nothing to do with a computer program product and therefore these claims do not further limit the method of claim 15. Exactly what aspect of a computer program product that is being limited can not be determined from these claims.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Application/Control Number: 10/675,306

Art Unit: 2651

Claims 16-20 are drawn to a "program" per se as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and

Application/Control Number: 10/675,306 Page 4

Art Unit: 2651

functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. The term "residing" claim 16, line 1 is not considered have the same meaning as "embodied".

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5-10, 12-17 and 19-20 of U.S. Patent No. 6,934107. Although the conflicting claims are not identical, they are not patentably distinct from each other because each is directed to changing the mode of operation of a drive based a temperature of the drive. Any differences in the claims are deemed to be an obvious wording of the claimed invention in which one of ordinary skill could have made.

Application/Control Number: 10/675,306

Art Unit: 2651

8. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,865,506. Although the conflicting claims are not identical, they are not patentably distinct from each other because each is directed to changing the mode of operation of a drive based a temperature of the drive. Any differences in the claims are deemed to be an obvious wording of the claimed invention in which one of ordinary skill could have made.

Page 5

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 11. Claims 1, 4-6, 9-11, 14-16, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al.

Re claims 1 and 4: Ottesen et al. teaches a disk drive arrangement and corresponding method of operation in which a temperature of the drive is monitored in relation to a desired temperature (threshold) column 6, lines 50-64 and controls a disk spindle speed to cool the drive if the threshold temperature is exceeded. Claim 1 additionally sets forth that the controlling method occurs during testing of the disk drive and that switching between the modes occurs based on the temperature. The testing feature is satisfied by the arrangement of Ottesen et al. at least by the temperature testing arrangement as disclosed. The claimed switching back between the modes although not specifically discussed in Ottesen et al., such a feature would have been obvious to one of ordinary skill in the art at the time of the invention given the teaching of Ottesen et al. since there would be no need to maintain a slow speed of operation if the disk drive is below a given temperature and therefore would have been obvious to increase the speed of rotation to allow for an increase in recording/reproducing speed. Also, note claim 3 which discusses plural velocities. Claims 6, 9, 11, 14, 16, 19 although written using different language this language is deemed to amount to the same as that previously set forth in claims 1 and 4 and therefore rejected for similar reasons. Additionally the claimed program code as set forth in claims 16 and 19 are deemed satisfied by the program code in which CPU (2110 uses to control the operation of the drive. The claimed clock speed as set forth in claims 5, 10, 15 and 20 are deemed satisfied by the arrangement of figure 2 that includes a motor control (210, 205 and 202)

that is used to provide appropriate signals to control speed of rotation of the spindle.

Application/Control Number: 10/675,306

Art Unit: 2651

12. Claims, 2-3, 7-8, 12-13 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. in view of Francis et al.

Page 7

The teaching of Ottesen et al. is discussed above and incorporated herein. Claims 2-3, 7-8, 12-13 and 17-18 additionally set forth to change the seek modes based on the temperature. Although this feature is not taught by Ottesen et al. such is well known as taught by Francis et al. (see for example abstract) to maintain a temperature within a safe level. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporated the teaching of Francis et al. in the arrangement of Ottesen et al. such that while monitoring a temperature in a seek speeds are changed to maintain a safe temperature range of the drive.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US006169930B1, US006747838B2, US006078455A, US 20030227706A1, US 20030048571A1 are cited showing related arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Sniezek whose telephone number is 571-272-7563. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Andrew L. Sniezek
Primary Examiner
Art Unit 2651

A.L.S. 10/1/05